

**IN THE CLAIMS:**

Please amend claims 3 and 7 as follows.

1. (Original) A method of allocating bandwidth in a first node that is operable in an ad hoc, wireless network configured to support at least one guaranteed feasible flow allocation, the method comprising the steps of:

initiating a communication between the first node and a second node in the network that, together, are endpoints of a link, the communication being related to possible bandwidth allocation adjustment of a flow sharing the link;

determining, in the first node, a first new bandwidth allocation that approaches a first optimization condition for the flow;

communicating with the second node to determine a mutually-agreed upon optimal bandwidth allocation for the flow;

notifying neighbor nodes in the network of the mutually-agreed upon optimal bandwidth allocation when reallocation is needed; and

adopting the mutually-agreed upon optimal allocation for the flow when reallocation is needed.

2. (Original) The method of claim 1, further comprising the step of:  
re-performing the initiating, determining, communicating, notifying, and adopting steps at a later point in time.

3. (Currently Amended) The method of claim 1 wherein the determining step comprises determining, in the first node, a ~~the~~ first new bandwidth allocation that approaches at least one of a Max Min Fair condition and a Quality of Service guarantee condition.

4. (Original) The method of claim 1, wherein the initiating step comprises initiating a communication between the first node and the second node in a slotted, ad hoc, wireless network.

5. (Original) The method of claim 1, wherein the initiating step comprises initiating a communication between the first node and the second node in a network on which a Time Division Multiple Access (TDMA) schedule is implemented.

6. (Original) A network device configured to allocate bandwidth in an ad hoc, wireless network configured to support at least one guaranteed feasible flow allocation, the device comprising:

a first communication unit configured to initiate a communication between the device and a node in the network that, together, are endpoints of a link in the network, the communication being related to possible bandwidth allocation adjustment of a flow sharing the link;

a first processing unit configured to determine a first new bandwidth allocation that approaches a first optimization condition for the flow, wherein the first processing unit is operably connected to the first communication unit;

a second communication unit configured to communicate with the node to determine a mutually-agreed upon optimal bandwidth allocation for the flow, wherein the second communication unit is operably connected to the first communication unit;

a third communication unit configured to notify neighbor nodes in the network of the mutually-agreed upon optimal bandwidth allocation when reallocation is needed, wherein the third communication unit is operably connected to the first communication unit; and

a second processing unit configured to adopt the mutually-agreed upon optimal allocation for the flow when reallocation is needed, wherein the second processing unit is operably connected to the first communication unit.

7. (Currently Amended) A computer program embodied on a computer readable medium ~~A computer program embodied on computer-readable media, with the computer program configured to allocate bandwidth in an ad hoc, wireless network configured to support at least one guaranteed feasible flow allocation, the computer program being configured to control a processor to perform~~the computer program comprising:

a first sub-routine for initiating a communication between the first node and a second node in the network that, together, are endpoints of a link, the communication being related to possible bandwidth allocation adjustment of a flow sharing the link;

a second sub-routine for determining, in the first node, a first new bandwidth allocation that approaches a first optimization condition for the flow;

a third sub-routine for communicating with the second node to determine a mutually-agreed upon optimal bandwidth allocation for the flow;

a fourth sub-routine for notifying neighbor nodes in the network of the mutually-agreed upon optimal bandwidth allocation when reallocation is needed; and

a fifth sub-routine for adopting the mutually-agreed upon optimal allocation for the flow when reallocation is needed.

8. (Original) A network device configured to allocate bandwidth in an ad hoc, wireless network configured to support at least one guaranteed feasible flow allocation, the device comprising:

initiation means for initiating a communication between the first node and a second node in the network that, together, are endpoints of a link, the communication being related to possible bandwidth allocation adjustment of a flow sharing the link;

determination means for determining, in the first node, a first new bandwidth allocation that approaches a first optimization condition for the flow;

determination means for communicating with the second node to determine a mutually-agreed upon optimal bandwidth allocation for the flow;

notification means for notifying neighbor nodes in the network of the mutually-agreed upon optimal bandwidth allocation when reallocation is needed; and

adoption means for adopting the mutually-agreed upon optimal allocation for the flow when reallocation is needed.